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植 物 研 究 雜 誌

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Vol. 30 No. 3 March 1955

Hiroshi HARA*: **Critical notes on some type specimens of East-Asiatic plants in foreign herbaria (2)**

原 寛*: 欧米にある東亜植物基準標本の検討 (2)

7) **Aruncus sylvester** Kostel. and **A. dioicus** (Walt.) Fernald. For fixing the specific epithet of widespread Eurasian *Aruncus*, it is a crucial problem whether the plant should be considered conspecific with eastern N. American *A. dioicus* or not, as pointed out by Fernald in 1939. The differences between *A. sylvester* and *A. dioicus* were critically studied by Fernald in 1936, but the plants of eastern Asia are so variable that it is difficult to refer them to either of the two. In 1937 and 1952, I treated them under *A. sylvester*, agreeing with Fernald's and Hultén's opinion, but the Japanese plant which was formerly called var. *americanus* comes nearer to *A. dioicus* in various respects.

The common form, var. *tenuifolius*, in Honshu of Japan has thin elongate leaflets with long-caudate tip, loosely-flowered inflorescences, small petals less than 1 mm long especially tiny in female flowers, and small follicles 2–2.5 mm long with short style 0.3–0.5 mm long, and seeds 1.5–2 mm long. I carefully compared it with rich collections of *A. dioicus* studied by Fernald in the herbarium of Harvard University.

The American specimens of *A. dioicus* identified by Fernald as the typical form have smaller follicles 1.5–2 mm long with longer style 0.5–0.8 mm long, and larger petals of female flowers attaining 1–1.5 mm long, as compared with the Japanese ones. But *A. dioicus* var. *pubescens* Fernald with more slender follicles 1.7–2.5 mm long matches well the Japanese specimens in leaves, calyces, follicles and seeds, and differs from the latter only in having longer styles and tends to have larger petals of female flowers. While in eastern Asia too, some specimens have styles

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attaining 0.8 mm long. For example, var. *insularis* Hara which occurs in the Idzu islands south of middle Honshu has large petals of female flowers attaining 1.5 mm long, long styles, and firm calyx-lobes as in *A. dioicus*.

On the other hand the Japanese race, var. *tenuifolius*, differs form the typical *A. sylvester* of Europe by thin elongate leaflets, lax inflorescences, smaller follicles, and smaller petals especially of female flowers, showing somewhat intermediate characters between *A. sylvester* and *A. dioicus* var. *pubescens*. And a few specimens from Europe or California have sometimes small follicles as those of the Japanese race. In Japan, the shape, size, and pubescence of leaflets are very variable. The plant in northern Japan as well as in Saghalin and Amur has often thicker broader leaflets and densely-flowered inflorescences, but has similar flowers and follicles to those of var. *tenuifolius*, and they are completely connected by intermediate forms. Some specimens from the subalpine belt of central Honshu are dwarf with small dense inflorescences, resembling var. *kamtschaticus*. The typical var. *kamtschaticus* in the northern part of eastern Asia, has also small follicles, but has dense compact inflorescences with short branches and larger petals than var. *tenuifolius*. In Korea, Manchuria, Amur, and China too, some specimens agree well with the Japanese, while some others have larger follicles as in the European or longer styles as in the eastern N. American ones. Especially in southwestern China, the plants display a wide range of variation in the shape, serration, and pubescence of leaflets and the length of follicles and styles.

Considering variable characters above mentioned, it is difficult to draw distinct lines of demarcation within the group, and it is better to treat *Aruncus* as a very polymorphous monotypic genus widerspread in Eurasia and N. America, although several geographical races briefly summerized below have differentiated during a long period.

Aruncus dioicus (Walt.) Fernald var. *dioicus* of eastern N. America, a nomenclatorial type of the species, has smaller follicles, longer styles, smaller seeds, larger petals of female flowers, and firmer calyx-lobes, and it gradually passes into var. *pubescens* (Rydb.) Fernald with more slender follicles. The western American plant which may be called as var. *acuminatus* (Dougl.), has larger follicles, shorter styles, larger seeds, slightly smaller petals of female flowers, and thinner calyx-lobes. The European var. *vulgaris* (Maxim.) (*Aruncus silvester* Kostel.) is very near to var. *acuminatus*, and has larger follicles 2.5–3 mm long, shorter styles 0.3–0.5 mm long, larger seeds 2–2.5 mm long, and larger petals.

In Asia the plants with small fruits and small petals are prevailing, but they are much more variable than in Europe and N. America. The Japanese var. *tenuifolius*, the northern var. *kamtschaticus*, and the European var. *vulgaris* intergrade in continental eastern Asia, and various perplexing forms are found there.

The Himalayan race, var. *triternatus* (Wall.) has shorter leaflets which are appressed villose along nerves beneath, 3-8 carpels in a flower, and small follicles. In alpine Yunnan occurs a striking form, var. *rotundifoliolatus*, which is near to var. *triternatus*. But it has roundish leaves, and tends to have hermaphrodite flowers, and may be the same as *Aruncus gombalanus* first described as an independent genus, *Pleiosepalum* by Handel-Mazzetti.

Besides the races enumerated above, there are more local but distinct races on old mountains of easterns Asia which have often been regarded as separate species. Var. *subrotundatus* (Tatew.) endemic on grassy slopes of Mt. Apoi of south Hokkaido has small follicles, and shinning broad ovate to orbicular leaflets which are thicker, glabrous, roundish at the tip and often cordate at the base, resembling var. *rotundifoliolatus* of Yunnan. Var. *laciniatus* (Hara) also on mountains in Hidaka of Hokkaido has ovate-lanceolate deeply incised leaflets and narrow oblong petals 2 mm long of male flowers. A very singular race is var. *astilboides* (Maxim.) on Mt. Hayachine of norther Honshu. It is a dwarf alpine form with small glabrous leaflets, and small inflorescences, and has always erect pedicels with upright follicles 2.5-3 mm long, whereas all the above races have deflexed pedicels with pendulous follicles. Var. *aethusifolius* (Lév.) of Quelpaert is another dwarf race with erect follicles, but its small leaflets are very deeply laciniate. The occurrence of these endemic races on isolated mountains which have rich flora of old origin seems to support Hultén's view that *Aruncus* is a very old relict of the Tertiary flora.

Aruncus dioicus (Walter) Fernald in Rhodora **41**: 423 (1939) ; Man. ed. 8, 756 (1950)

var. **dioicus**. *Actaea dioica* Walter, Fl. Carol. 152 (1788). *Aruncus sylvester β. americana* Maxim. in Act. Hort. Petrop. **6**: 170 (1879), p.p. *A. allegheniensis* Rydberg in N. Amer. Fl. **22** (3): 256 (1908)—Fernald in Rhodora **38**: 180, t. 416, f. 1, 2, 5 & 8 (1936).

Dist. Eastern N. America (southern New York to Kent., south to Alabama & Georgia).

var. **pubescens** (Rydberg) Fernald in Rhodora **41**: 423 (1939) ; Man. ed. 8, 756 (1950). *Aruncus pubescens* Rydberg in N. Amer. Fl. **23** (3): 256 (1908). *A. allegheniensis* var. *pubescens* (Rydb.) Fernald, l. c. **38**: 179, t. 416, f. 4 (1936).

Dist. Eastern N. America (western Kent. to Iowa, south to Arkansus & Okla-

homa).

Aruncus dioicus var. **acuminatus** (Rydb.) Hara, comb. nov. *A. acuminatus* (Douglas) Rydberg in N. Amer. Fl. **22** (3): 255 (1908). *A. sylvester* var. *acuminatus* (Douglas) Jepson, Fl. Calif. **2**: 168 (1936).

Dist. Western N. America (southern Alaska, south to northern California).

var. **vulgaris** (Maxim.) Hara, comb. nov. *Spiraea Aruncus* L., Sp. Pl. ed. 1, **1**: 490 (1753). *Aruncus vulgaris* Refinesque, Sylv. Tellur. 152 (1838), nom. nud. *A. silvester* Kosteletzky, Ind. Pl. Hort. Prag. 15 (1844), nom. nud.—Maxim. in Act. Hort. Petrop. **6**: 169 (1879). *A. sylvester α. vulgaris* Maxim., l. c. 170 (1879). *? A. asiaticus* A. Pojarkova in Fl. URSS. **9**: 311 & 491 (1939)

Dist. Central Europe, Caucasus, Armeria, northern Persia, Amur?, China?, and Korea?

var. **kamtschaticus** (Maxim.) Hara, comb. nov. *A. sylvester γ. kamtschatica* Maxim. in Act. Hort. Petrop. **6**: 170 (1879). *A. kamtschaticus* (Maxim.) Rydberg in N. Amer. Fl. **22** (3): 256 (1908)—Pojarkova in Fl. URSS. **9**: 311 (1939).

Dist. Anadyr, Kamchatka, Kuriles, Yezo, Ochotsk, Lena?, Amur?, and Alaska?

f. **tomentosus** (Koidzumi) Hara, stat. nov. *A. sylvester ξ. tomentosa* Koidzumi in Bot. Mag. Tokyo **23**: 167 (1909). *A. kamtschaticus* var. *tomentosa* (Koidz.) Miyabe et Tatew. in Trans. Sapporo Nat. Hist. Soc. **14**: 6 (1935). *A. vulgaris* var. *tomentosus* (Koidz.) Nemoto, Fl. Jap. Suppl. 305 (1936). *A. tomentosus* Koidzumi in Act. Phy. Geo. **5**: 41 (1936). *A. silvester* var. *kamtschaticus* f. *pubescens* Tatew. et Yoshimura, Rep. Veg. Is. Shikotan 37 (1940).

Dist. South Kuriles, Yezo, Saghalin, and Ussuri.

var. **tenuifolius** (Nakai) Hara, comb. nov. *A. sylvester β. americana* Maxim., l. c. 170 (1879), p. p.—Matsum., Ind. Pl. Jap. **2** (2): 196 (1912). *A. silvester* var. *tenuifolius* Nakai ex Hara in Journ. Jap. Bot. **13**: 387 (1937); in Journ. Fac. Sci. Univ. Tokyo sect. 3, **6**: 67 (1952). *A. kyusianus* Koidzumi in Act. Phy. Geo. **5**: 41 (1936). *A. sylvester* var. *tenera* Kitagawa in Rep. Inst. Sci. Manch. **5** (5): 155 (1941).

Dist. Yezo, Honshu, Shikoku, Kyushu, north Korea, Amur?, south Manchuria, and China.

var. **insularis** Hara, var. nov.

Foliola crassa glabra ovata—oblongo-lanceolata apice caudato-acuminata. Pedicelli basi unibracteati et saepe ad apicem bibracteolati, bracteis 3.5–4.5 (5) mm longis. Flores ♀: lobi calycis lanceolati 1–2-denticulati 1.2–1.5 mm longi foliacei virides. Petala elliptica ca. 1.2–1.5 mm longa. Pistilla 3 ca. 2 mm longa, stylo ca. 0.8 mm longo. Stamina abortiva minutissima.

Typus. Honshu. Prov. Idzu: Ins. Ōshima (cult. in Tokyo) (H. Hara, Jun. 1952, ♀ fl., in Herb. TI.).

Dist. Idzu Islands of Honshu.

var. **triternatus** (Maxim.) Hara, comb. nov. *Spiraea triternata* Wallich, Cat. no. 706 (1829), nom. *Aruncus sylvester δ. triternata* (Wall.) Maxim. in Act. Hort. Petrop. **6**: 171 (1879).

Dist. Himalaya (Simla, Nepal, Sikkim).

Aruncus dioicus var. **rotundifoliolatus** Hara, var. nov.

Foliola late ovata vel obovata apice rotundata vel breviter acuminata subtus ad nervos appresse villoso-pilosa. Flores ♀: petala 0.8 mm longa, ovaria saepe 4–5. Folliculi ca. 2.5 mm longi, stylis ca. 0.4 mm longis.

Typus. Yunnan. Upper Kiukiang valley, Chialahmuto 3500 m (T. T. Yü, no. 19719, Aug. 7, 1938, ♀ fl. in Herb. Harvard).

Dist. Alpine region of Yunnan.

var. **subrotundatus** (Tatew.) Hara, comb. nov. *A. subrotundata* Tatewaki in Res. Bull. Exper. For. Hokkaido Univ. **5**: 129 (1928). *A. sylvester* var. *subrotundus* (Tatew.) Ohwi, Fl. Jap. 627 (1953); in Bull. Sci. Mus. Tokyo **33**: 75 (1953).

Dist. Yezo (Mt. Apoi in prov. Hidaka).

var. **laciniatus** (Hara) Hara, comb. nov. *A. vulgaris* var. *laciniatus* Hara in Journ. Jap. Bot. **9**: 513, fig. 2 (1933). *A. silvester* var. *laciniatus* (Hara) Hara, l. c. **13**: 387 (1937).

Dist. Yezo (mountains of southern Hidaka).

var. **astilboides** (Maxim.) Hara, comb. nov. *Spiraea Aruncus α. astilboides* Maxim. ex Franch et Sav., Enum. Pl. Jap. **1**: 121 (1875), nom. nud. *Aruncus astilboides* Maxim. in Act. Hort. Petrop. **6**: 171 (1879). *A. sylvester* var. *astilboides* (Maxim.) Makino in Bot. Mag. Tokyo **17**: 209 (1903). *A. vulgaris* var. *astilboides* (Makino) Nemoto, Fl. Jap. Suppl. 305 (1936).

Dist. Northern Honshu (Mt. Hayachine).

var. **aethusifolius** (Lév.) Hara, comb. nov. *Astilbe Thunbergii* Miq. var. *aethusifolia* Léveillé in Fedde, Rep. **8**: 283 (1910). *Aruncus aethusifolius* (Lév.) Nakai in Bot. Mag. Tokyo **26**: 325 (1912).

Dist. Quelpaert.

8) **Oplopanax horridus.** The Devil's Club is growing in three separated areas, western N. America, Japan, and Korea, and it is often treated as three species, i. e. *Oplopanax horridus*, *O. japonicus*, and *O. elatus* respectively by Nakai (1924 & 27), Rehder (1940 & 49), Pojarkova (1950), Hara (1952 & 54), Li (1952), and Ohwi (1953). On examining ample material form N. America and eastern Asia, I think that the distinguishing characters between them, especially those between N. American and Japanese plants are too weak to separate them specifically. There seems to be no distinct morphological differences among them in the shape and hairiness of inflorescences, bracts, flowers, and fruits, and geographical variations are observed only in the shape and serrature of leaves.

The N. American plant is rather uniform, but the Japanese plant is pretty variable especially in the shape of leaves. The plant of central Honshu has more deeply laciniate and long-caudate leaf-lobes (Fig. 1, A), whereas those of northern

Japan are shorter and shortly acuminate at the apex (Fig. 1, B), and agree with those of N. America in the shape. There are also intermediate forms in the northern part of Kwantō and the southern part of Tōhoku districts. Some Japanese specimens have peltate leaves with thicker prickles on main veins, and longer pedicels, while some are almost inseparable from those of N. America.
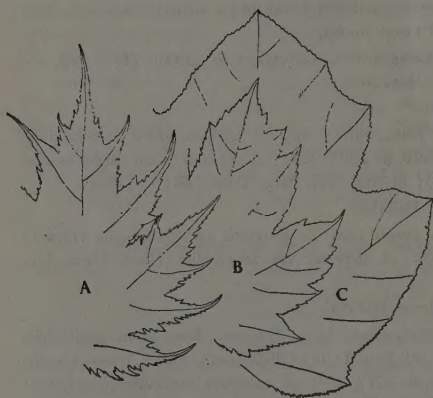
Fig. 1. *Oplopanax horridus* Miquel
A. var. *japonicus* Hara (Mt. Hakusan), B. var. *brevilobus* Hara (Mt. Hakkoda), C. subsp. *elatus* Hara (N. Korea).

Among three geographical races, the plant of Korea is most characteristic in having petioles more thickly beset with prickles and villose-hairs, and shorter and more roundish lobes of leaves which are not lobed or have only one small lobule on each side, shortly acuminate at the apex, and more minutely and closely serrate on the margin (Fig. 1, C). Also in N. American material, calyx-lobes sometimes develop into a needle-shape.

Oplopanax horridus (J. E. Smith) Miquel, Ann. Mus. Bot. Lugd.-Bat. **1**: 16 (1863)—Rehder, Bibl. Cult. Tr. 491 (1949).

Panax horridum J. E. Smith in Rees, Cyclop. **26**: P. no. 10 (1813).

var. **brevilobus** Hara, var. nov. (Fig. 1, B).

Differt a var. *japonico* lobis foliorum latioribus breviter lobulatis et apice breviter acuminatis.

Typus: Honshu. Prov. Ugo, in monte Taiheizan (H. Hara et S. Kurosawa, Aug. 16, 1952 in Herb. TI.).

Dist. On mountains of south-east Hokkaido and northern Honshu.

var. **japonicus** (Nakai) Hara, stat. nov. *Echinopanax japonicum* Nakai in Journ. Arnold Arb. **5**: 15 (1924). *Oplopanax japonicum* (Nakai) Nakai, Fl. Sylv. Korea. **16**: 38 (1927)—Hara in Journ. Fac. Sci. Univ. Tokyo sect. 3, **6** (2): 90 (1952); Enum. Sperm. Jap. **3**: 288 (1954).

Lectotypus: Honshu. Prov. Kaga, in monte Hakusan (J. Nikai, no. 1981, Aug. 14, 1909 in Herb. TI.).

Dist. In subalpine coniferous forests of central Honshu and Shikoku.

subsp. **elatus** (Nakai) Hara, stat. nov. *Echinopanax elatus* Nakai, Fl. Korea. **1**: 276, t. 15 (1909); in Journ. Arnold Arb. **5**: 15 (1924). *Oplopanax elatum* (Nakai) Nakai, Fl. Sylv. Korea. **16**: 38, t. 11 (1927).

9) **Patrinia triloba** Miquel. The type specimen (Siebold) of *Valeriana triloba* Miquel is still in bud, but its largest bud just before anthesis has a thick short spur about 0.7 mm long, and is identical with var. *gibbosa* described by Makino. *Patrinia palmata* Maxim. belongs to another race with slender spurs attaining 2-3 mm long, and should be called *P. triloba* var. *palmata* (Maxim.) Hara. These two races generally occupy their own separate geographical areas.

Patrinia triloba (Miq.) Miquel in Arch. Néerl. Sci. Nat. **5**: 95 (1870)—Hara, Enum. Sperm. Jap. **2**: 70 (1952).

var. **triloba**. *Valeriana triloba* Miquel, Ann. Mus. Lugd.-Bat. **3**: 115 (1867). *Patrinia palmata* Maxim. β. *gibbosa* Makino in Bot. Mag. Tokyo **21**: 157 (1907). *P. triloba* var. *gibbosa* (Mak.) Matsum., Ind. Pl. Jap. **2** (2): 606 (1912)—Hara, l. c. 71 (1952).

var. **palmata** (Maxim.) Hara, stat. nov. *P. palmata* Maxim. in Bull. Acad. Sci. St.-Pét. **12**: 66 (1867).

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7) ヤマブキショウマ類　ヤマブキショウマは Maxim. 以来北米東部産 (現在の *Aruncus dioicus*) と同一とされていたが，近年は欧洲産 (*A. sylvester*) と合一される事が多い。これらの関係を明らかにしようと思い欧米の標本を多数みたが結局何れとも別種とするのは無理であると考えるに至つた。ヤマブキショウマの普通形は北米東部の *A. dioicus* var. *pubescens* に近く，花柱が短い外は区別なく，一方欧洲産とも蒴果が小形で雌花の花瓣が小さい点が異るのみである。しかも東亜の本類は極めて多形でこれらの性質は変り易くいずれも例外があつてはつきり区別できない。本類は古くから地方的に分化しつつあると思われるが未だ種として分かつには充分でなく，すべてを同一種とみなし古い種名 *Aruncus dioicus* の下に著しい地方型を変種と認めることにする。日本では南からウスバヤマブキショウマ，ヤマブキショウマ，エゾヤマブキショウマ，チシマヤマブキショウマと順次にうつり変るがその境ははつきりしない。伊豆七島産のものは苞，萼片，花瓣，花柱が長く葉はやや厚く無毛でシマヤマブキショウマ (新称) と呼ぶ。小葉が円頭滑沢なアポイヤマブキショウマ，果梗が直立し蒴果が上向する高山型のミヤマヤマブキショウマやタンナショウマは産地も限られ最も特徴のある型である。

8) ハリブキ　北米の *Oplopanax horridus* に比べて葉が往々楯状となり裂片は欠刻深く長尾状に尖るので区別されてきたが，これは本州中部，四国産のものについてあてはまる。しかし我国北部のものでは葉形は全く北米産と一致し，この北方型をヒロハハリブキ (var. *brevilobus* Hara) と呼ぶことにするが，磐梯山，日光，谷川岳などには

ハリブキとの中間形も見られる。

9) キンレイカ *Valeriana triloba* Miq. の基準標本は Siebold の採品とされているが,'ハクサンヲミナメシ, キンダンクハ' と和紙に書かれていて恐らく日本の友人から貰つた標本と思う。まだ蕾ではあるがかなり大きくなつたものでも距は太く短かくコキンレイカの形と見られる。そこで距の細長なキンレイカの方はその変種 var. *palmata* (Maxim.) Hara となる。この2型は奥山氏が指摘された様に本州中部では分布も異りかなりはつきり区別できるが, 近畿へ入ると距の長さの中間の形がでて分り難くなり別種とするのは無理と思う。

○トンボソウ属（原 寛） Hiroshi HARA: On Asiatic species of *Tulotis* Rafin.

Perularia Lindl. (トンボソウ属) を保留属名とする日本からの提案は昨年高等植物関係の特別委員会で否決された。トンボソウ属は *Platanthera* 又は *Habenaria* と合一されることも多いが, その独立性を認めた場合には東亜の種類は次の様になる。

Tulotis Rafinesque, Herb. Rafin. 70 (1833); Fl. Tellur. **2**: 37 (1837).

Perularia Lindley, Bot. Reg. t. 1701 (1834), nom. nud.; Gen. et Sp. Orchid. 281 (1835).

Tulotis asiatica Hara, nom. nov.

Orchis fuscescens L., Sp. Pl. ed. 1, **2**: 943 (1753) (non *Tulotis fuscescens* Rafin. ex Jackson 1895, fide Merrill). *Perularia fuscescens* (L.) Lindley, Gen. et Sp. Orchid. 281 (1835). *Platanthera fuscescens* (L.) Kränzlin, Orchid. Gen. et Sp. **1**: 637 (1899), 943 (1901).

Tulotis ussuriensis (Reg. et Maack) Hara, comb. nov.

Platanthera tipuloides γ. *ussuriensis* Regel et Maack, Tent. Fl. Ussur. 142, t. 10, f. 7-9 (1861). *Platanthera ussuriensis* (Reg.) Maxim. in Bull. Acad. Sci. St.-Pét. **31**: 107 (1886). *Habenaria ussuriensis* (Max.) Miyabe in Mem. Boston Soc. Nat. Hist. **4** (7): 263 (1890). *Perularia ussuriensis* (Max.) Schlechter, Orchid. Sino-Jap. Prodr. 99 (1919).

Tulotis Iinumae (Makino) Hara, comb. nov.

Habenaria Iinumae Makino, Ill. Fl. Jap. **1**: 1, t. 53 (1891). *Platanthera Iinumae* (Makino) Makino in Bot. Mag. Tokyo **16**: 89 (1902). *Perularia Iinumae* (Mak.) Ohwi in Act. Phy. Geo. **1**: 142 (1932).

Tulotis shensiana (Kränzl.) Hara, comb. nov.

Habenaria shensiana Kränzlin in Engl., Bot. Jahrb. **36**, Beibl. 82, 24 (1905). *Perularia shensiana* (Kränzl.) Schlechter, Orchid. Sino-Jap. Prodr. 99 (1919).

Tulotis Souliei (Kränzl.) Hara, comb. nov.

Platanthera Souliei Kränzlin in Fedde, Rep. **5**: 199 (1908). *Perularia Souliei* (Kränzl.) Schlechter, Orchid. Sino.-Jap. Prodr. 99 (1919).

Tulotis whangshanensis (Chien) Hara, comb. nov.

Perularia whangshanensis Chien in Contr. Biol. Lab. Sci. Soc. Chin. Bot. **6**: 75 (1931)

Tsuguo HONGO*: **Notes on Japanese larger fungi (6)**

本郷次雄*: 日本産きのこ類の研究 (6)

27) **Hygrophorus pseudococcineus** Hongo, sp. nov. (*Hygrocybe pseudococcinea* Hongo)

Pileus 1-2.5 cm or more broad, convex to broadly convex, then expanded and often slightly depressed at the center, margin sometimes irregularly undulated; surface subhygrophanous, minutely and densely floccose all over or at least in the depression, then becoming somewhat squamulose, color brilliant scarlet when moist, becoming vermilion to orange when dry, hardly striatulate. Context thin, soft, yellow within, reddish under the pellicle, taste and odor none. Lamellae decurrent (arcuate when young), thickish, distant (L=27-42; l=(0) 1 (3)), yellowish-orange to cream-yellow, often whitish behind, edge even, 2-3mm wide. Stipe 2-5cm long, 3-6mm thick, equal or slightly thickened toward the base, often compressed, substriate, concolorous with the pileus, yellowish below, hollow. Spores hyaline under the microscope, broadly ellipsoid, smooth, 11-19×7.5-10μ, nonamyloid; basidia four-spored, 46-63×11-14μ; cheilo-
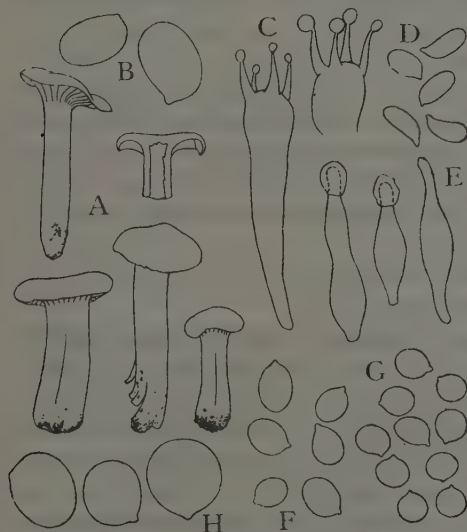
Fig. 1. *Hygrophorus pseudococcineus:* A, carpophores; B, spores; C, basidia. *Mycena adonis:* D, spores; E, pleurocystidia. *Filoboletus hanedai:* F, spores. *Resupinatus rhacodium:* G, spores. *Amanita longistriata:* H, spores. (A ×1; B, D, F-H ×1000; C, E ×600)

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and pleurocystidia not differentiated; gill-trama of parallel to subparallel hyphae; pileus-trama homogeneous beneath a turf-like covering of surface hyphae; clamp connections present.

Hab. Gregarious (to subcespitose), on the ground in mixed woods, Zeze-Kami-beppo-chō, Ōtsu, June 5, 1954 (type*).

Distr. Endemic (Ōmi).

This is a beautiful, very distinct species, characterised by the floccose-squamulose cap and the very large spores, and it probably lies near to *H. miniatus* Fr., *H. cantharellus* Fr., etc. Imai's *H. macrosporus* (Trans. Sapporo Nat. Hist. Soc. **16**: 14 (1939)) appears to be somewhat near, but it is said to have emarginate or free gills and white to yellowish stem.

Hygrophorus pseudococcineus. Pileo 1-2.5 cm lato, convexo-plano, minute floccoso-squamuloso, e coccineo expallente; carne tenui, pellicula coccinea, contexto flava; lamellis decurrentibus, crassis, distantibus, flavis aurantio-tinctis; stipite 2-5 cm longo, 3-6 mm crasso, aequali vel ad basim subincrassato, saepe compresso, pileo concolore, infra flavido, cavo; sporis hyalinis, late ellipsoideis, laevibus, 11-19×7.5-10 μ. In silvis ad terram.

28) **Mycena adonis** (Fr.) S. F. Gray, Nat. Arr. Brit. Pl., **1**: 620 (1821).

Marasmiellus adonis Singer (1949).

Pileus 7-10 mm broad, canico-campanulate, minutely and almost obsoletely papillate, not expanding; surface glabrous, deep pink, paler at the margin, pellucidly striate when moist. Context thin, membranous, concolorous with the surface, fragile. Lamellae ascending adnate or attached by a tooth, subdistant, narrow, white. Stipe 3-4.5 cm long, 1-1.2 mm thick, equal, flexuose, tubular, fragile, shining white, smooth, base hardly strigose. Spores hyaline under the microscope, subcylindric with a tapered apiculus, smooth, nonamyloid, 7-8.5×3-3.5 μ; basidia four (or two-) spored, 19-24×6-7 μ; pleurocystidia numerous, fusoid-ventricose with a long aciculate neck, hyaline, smooth, thin-walled, often with an amorphous incrustation at the apex, 50-60×7.5-10 μ; cheilocystidia abundant, similar to pleurocystidia.

Hab. Gregarious, among fallen leaves in woods, Agekawa-mura, Echigo, Oct. 15, 1954.

Dist. Europe, North America. New to Japan.

Ill. Cooke, Ill. Brit. Fungi, **2**: pl. 185 (1881-1883); Lange, Fl. Agar. Dan., **2**: pl.

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* The type specimens are deposited in the writer's institute.

53. f. A (1936); Smith, North Am. Sp. Mycena, pl. 19, f. B and text fig. 17, nos. 7, 9 (1947).

A pretty, delicate species. The spores of the writer's specimen were more or less narrower than those of the European and the American ones. The measurements of the spores for this species given by different authors are as follows:

Rea (1922) $7\text{-}8 \times 4\,\mu$ Lange (1936) $9 \times 5\,\mu$ (or $9_1/_2 \times 5^1/_2\,\mu$)

Smith (1947) $6\text{-}7 \times 3\text{-}3.5\,\mu$

29) **Filoboletus hanedai** (Kobayasi) Hongo, comb. nov.

Poromycena Hanedai Kobayasi, in Journ. Hattori Bot. Lab. **5**: 1 (1951).

Pileus 1-3 cm broad, convex to broadly convex, then nearly plane; surface glabrous, not viscid, dark gray when young, then cinereous to olive buff, or watery white, hygrophanous, translucent-mammillate when moist, becoming opaque and white when dry (except for the central area which becomes yellowish or buffy and somewhat wrinkled); margin incurved when very young, then straight, entire or slightly serrulate. Pores adnate to adnexed, often with subdecurrent tooth, subradially arranged, surface plane, whitish, equal or larger toward the center, oblong-angulate or nearly circular, 0.7-1.5 mm in diam.; tubes 4-5 mm long near the stipe, shorter toward the margin. Context thin, watery white, odor slight, taste none. Stipe central, 1.5-4 cm long, 1-2 mm thick, equal or somewhat tapering upward, often more or less thickened at the base, grayish, then watery white, pruinose, cartilaginous, fragile, tubular, often compressed. Spores ovoid to short ellipsoid, hyaline, smooth, amyloid, 6-9 5-6 μ (or $6.5\text{-}7 \times 5.5\text{-}6\,\mu$); basidia four-spored, $21\text{-}23 \times 7\text{-}7.5\,\mu$; hymenophoral trama regular, nonamyloid; pileustrama with a differentiated pellicle.

Hab. Subcespitose or densely gregarious, on rotten wood of frondose tree (*Machilus?*), Isl. Kashima, Shinjō-mura, Kii, Aug. 29, 1954.

Distr. Japan (Hiuga, Kii), Tawau, North Borneo, and Ponape.

Ill. Kobayasi, l. c., f. 1, A and f. 2.

It is a matter for regret that the writer did not observe the luminescence of this species. It is better to consider the present species as belonging to the genus *Filoboletus* rather than the *Poromycena* because of the truely poroid hymenophore and the amyloid spores.

30) **Resupinatus rhacodium** (Berk. et Curt.) Singer, Agaricales, 253 (1949).

Pileus 5-12 mm broad, fastened horizontally to the vertical substratum, orbicular, dimidiate or flabellate, more or less convex; surface cinereous, disc covered

with the dense, dark brown to blackish, strigose-velutinous tomentum, margin often radially wrinkled-striate. Context thin, concolorous with the surface, upper layer gelatinous. Lamellae subdistant, thin, radiating from a lateral or very excentric point behind, cinereous, whitish at the edge, narrow. Spores hyaline under the microscope, globose, smooth, nonamyloid, 4.5–5.5 μ in diam.; basidia four-spored, 18–22×4–5 μ.

Hab. On dead trunks of *Fraxinus*, Bot. Gard. of Kyoto Univ., Kyoto, June 15, 1954; June 22, 1954.

Distr. North America, Europe (Denmark). New to Japan.

Ill. Lange, Fl. Agar. Dan. **2**: pl. 66, f. A.

The blackish hairs of the disc readily separate this species from *R. applicatus* (Fr.) S. F. Gray.

31) **Marasmius ohshimae** Hongo et Matsuda, sp. nov. (*Pseudohiatula ohshimae* Hongo et Matsuda).

Pileus 1–5 cm broad, convex, then expanded, often gibbous, at length slightly depressed at the center; surface glabrous (hairy under a lens), subhygrophanous, not viscid, sometimes radially wrinkled especially at the center, color pure white, or tinged with cinereous or mouse-gray toward the center; margin even, slightly striatulate when moist. Context rather thin, white, or grayish under the pellicle in the pileus, pale ochraceous in the stipe, odor faint, taste mild. Lamellae adnexed, close to subdistant (L=27–40; 1–3–7), white, edge even, subventricose, 1–4 mm wide. Stipe 3–7 cm or more long, 1.5–4 mm thick, equal, sometimes compressed, often long-rooting, tubular, cartilaginous, pulverulent to minutely velvety, fulvous to ocher, apex white. Spores hyaline under the microscope, ellipsoid to cylindric, smooth, nonamyloid, 4.5–6.5×2–3 μ (or 3.5–5.5×1.5–2.5 μ); basidia four-spored, 15–21×5–5.5 μ; cheilo- and pleurocystidia similar, scattered, elliptical with an abruptly narrowed pedicel, or sometimes broadly clavate, the enlarged portion thick-walled, encrusted, 32–50×15–29 μ; gill-trama of subparallel hyphae, 6–12.5 μ in diam.; epicutis of the pileus consisting of a hymeniform layer from which long dermatocystidia arise; dermatocystidia of the pileus (pilocystidia) 80–230×10–29 μ, attenuated upward, apex usually capitate, somewhat thick-walled; those of the stipe (caulocystidia) 22–225×4.5–18 μ.

Hab. Solitary or gregarious, on buried twigs of conifers (especially of *Cryptomeria japonica*), Kurama-yama, Yamashiro, Oct. 27, 1953; Mt. Hiei, Ōmi, Nov. 3,

1954 (type); Tsugawa-chō, Echigo, Sept. 25, 1953 (I. Matsuda); Agekawa-mura, Echigo, Oct. 19, 1954.

Distr. Endemic (Yamashiro, Ōmi, Echigo).

Common. Autumn to early winter. This species is very closely related to *M. conigenus*, (Fr. sensu Favre) Favre, but is readily distinguished by its habitat and large pilocystidia.

Marasmius ohshimae. Pileo 1–5 cm lato, convexo dein plano, glabro, subhygrophano, albo vel centro cinereo-griseo, margine leviter striatulo; carne subtenui, odore obsoleto; lamellis adnexis, subconfertis vel subdistantibus, albis, subventricosis; stipite 3–7 cm longo, 1.5–4 mm crasso, aequali, basi saepe radicato, subtiliter fistuloso, pulverulento, fulvo-argillaceo apice albo; sporis hyalinis, ellipsoideis vel cylindraceis, laevibus, 4.5–6.5×2–3 μ (vel 3.5–5.5×1.5–2.5 μ); cystidiis ellipticis pedicellatis vel late clavatis, 32–50×15–29 μ. Ad ramulos dejectos *Cryptomeriae japonicae*.
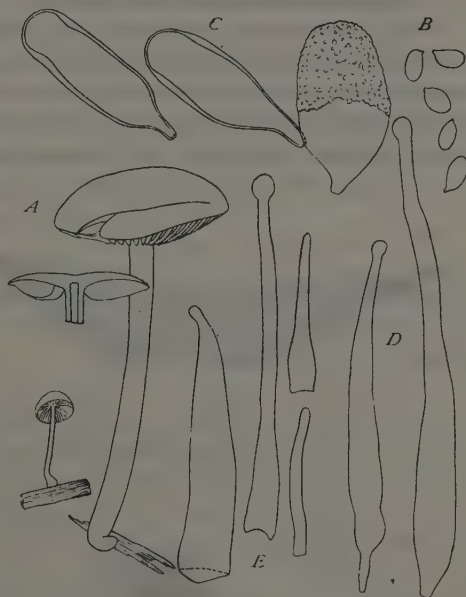
Fig. 2. *Marasmius ohshimae:* A, carpophores (×2/3); B, spores (×1000); C, cheilo- and pleurocystidia (×600); D, dermatocystidia on the pileus (×400); E, dermatocystidia on the stipe (×400).

32) **Amanita longistriata** Imai, Agar. Hokk. **1**: 11 (1938).

Spores white in deposits, globose to subglobose, smooth, with a large central gutta, nonamyloid, 11–15×10–13 μ; basidia four-spored, 36–40×14–15 μ; hymenophoral trama bilateral.

Hab. On the ground in pine woods, Yoshida-yama, Kyoto, Sept. 22, 1952.

Distr. Endemic (Ishikari, Yamashiro).

Uncommon. The present species appears to be quite close to *A. spreta* Peck, but is readily distinguished by the subcarnescent gills.

33) **Russula subnigricans** Hongo, sp. nov.

Pileus 5–11.5 cm or more broad, convex, then plane and depressed, at length infundibuliform; margin incurved at first; suaface dry, appearing minutely velvety, fuliginous-umber, slightly paler toward the margin, pellicle hardly separable, not tuberculoso-striate. Context thick, compact, white, becoming reddish when broken, but *not blackening*, taste and odor none. Lamellae adnate, or with a slightly de-
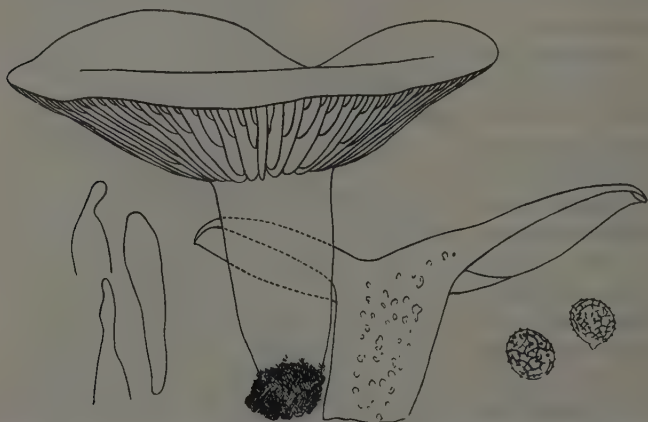
Fig. 3. *Russula subnigricans*. Carpophores (×1), spores (×1500), and pleurocystidia (×900).

current tooth, distant, sometimes more or less intervenose, scarcely forked, pale cream, becoming reddish when bruised, rather thick, moderately broad (6–9 mm), brittle. Stipe 3–6 cm long, 1–2.5 cm thick, equal or attenuated downward, indistinctly rugoso-striate, paler than the pileus, whitish at the base, solid (or stuffed). Spores hyaline under the microscope, subspherical or subspheric-oval, somewhat verrucose, with a minute reticulation, amyloid, 1-guttulate, 7–9×6–7 μ; basidia four-spored, 38–50×8–9.5 μ; cheilo- and pleurocystidia similar, scattered, lanceolate basidiiform or narrowly fusiform, thin-walled, 53–88×9.5–12.5 μ; gill-trama intermixed; pellicle of pileus made up of interwoven, dark umbrinous, 4–13.5 μ broad hyphae.

Hab. Gregarious or scattered, on the ground in woods of *Shiia*, Miidera, Otsu, Sept. 4, 1954; Kiyomizu-dera, Kyoto, Sept. 4, 1954 (M. Hamada, type).

Distr. Endemic (Omi, Yamashiro).

This species is apparently very close to *R. nigricans* Fr., but its flesh never blackens though a rubescence takes place when broken, and its gills are not so wide as those of the latter. Poisonous?

Russula subnigricans. Pileo 5-11.5 cm lato, e convexo expanso-depresso, sicco, fuligineo-umbrino, margine primo involuto, astriato; lamellis adnato-subdecurrentibus, distantibus, ±latis, cremeis; stipite 3-6 cm longo, 1-2.5 cm crasso, aequali vel deorsum attenuato, pileo pallidiore, solido; sporis subsphaeroideis, 7-9×6-7 μ, verrucis brevibus, subreticulatis; cystidiis 53-88×9.5-12.5 μ.—*Caro alba, fracta rubescens, sed non nigricans.* In silvis frondosis.

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27) **オオアカヌマベニタケ**(新種) 傘，茎共にあざやかな赤色を呈し，傘の表面は微細なる鱗被を密に有する。胞子は極めて大形。大津市膳所上別保町の山林内にてとる。

28) **コウバイタケ** (新称) ピンク色の傘を有する繊弱なきのこである。越後国東蒲原郡揚川村の林内にて採集した。

29) **アミヒカリタケ** (小林) 全体類白色にて菌孔を有し，暖地の林内朽木(タブノキ?)上に束生ないし群生する。紀伊国西牟婁郡新庄村神島にて採集した。本菌の発光性につき，残念乍ら筆者は観察することができなかつた。

30) **クロゲシジミタケ** (新称) シジミタケ *Resupinatus applicatus* に近縁の菌なるも，表面基部に黒毛を密生する点で区別せられる。京都大学植物園でトネリコ類の枯幹に群生せるものを得た。

31) **スギエダタケ** (新称) マツカサシメジ *Marasmius conigenus* に酷似するも針葉樹とくにスギの落枝上に生ずる。京都市鞍馬山，近江比叡山，越後津川町及び揚川村にて採集。種名 *ohshimae* は動物学者たる九大名誉教授大島広博士を紀念して命名した。

32) **タマゴテングタケモドキ** (今井) 北海道で今井博士が立てられた種類で褶が最初白色なるも後淡い肉色を帯びてくるのが著しい特徴である。京都市吉田山にて採集。

33) **ニセクロハツ** (新種) クロハツ *Russula nigricans* に近縁の種類であるが，肉が赤変するも黒色とならざる点に於て区別せられる。1954年9月上旬， 京都市にて本菌らしききのこを食して死亡した例があるので警戒を要する。京都市清水寺，大津市三井寺境内のシイ林内に生ずる。

本研究の一部は文部省科学研究助成補助金によつてなされたものである。

Taketoshi HINODE*: **The desmid-flora of Akai-yachi (2)**

日出武敏*: 赤井谷地のチリモ植物相 (2)

24. *Pleurotaenium Ehrenbergii* (Bréb.) De Bary—Length 450μ; breadth at the bases 26μ; at the apices 20μ. (Pl. III, figs. 1-3)

25. *Pl. ovatum* Nordst. var. *inermius* Moebius—Length 365μ; breadth 130μ; breadth of isthmus 49μ. (Pl. III, figs. 6, 7)

Pl. ovatum and var. *inermius* are not rare in Japan, and they are distributed in the considerably northern districts. I could find many specimens here.

26. *Pl. nodosum* (Bail.) Lund. — Length 214μ; breadth at the bases 46μ; at the apices 24μ. (Pl. III, figs. 4, 5)

Several specimens were observed, being slightly broader and stouter.

27. *Triploceras gracile* Bail.—Length 388μ; breadth at the bases 27μ, at the apices 24μ. (Pl. III, fig. 8) Very rare.

28. *Tetmemorus Brêbissonii* (Menegh.) Ralfs var. *minor* De Bary—Length 68μ; breadth 19μ; breadth of isthmus 16μ. (Pl. III, figs. 9-10)

29. *T. granulatus* (Bréb.) Ralfs var. *attenuatus* West—Length 105μ; breadth 24μ; breadth of isthmus 20μ. (Pl. III, figs. 11, 12)

30. *T. laevis* (Kütz.) Ralfs var. *minutus* (De Bary) Krieger—Length 57μ; breadth 17μ. (Pl. III, figs. 13-14)

31. *Euastrum ampullaceum* Ralfs—Length 86-89μ; breadth 51-57μ; breadth of isthmus 14μ; breadth of polar lobes 25-27μ. (Pl. III, fig. 15)

This desmid is very abundant in Japanese *Sphagnum*-bogs, usually associated with *E. humerosum* Ralfs, *E. cuneatum* Jenn., *E. pinnatum* Ralfs, *E. crassum* (Bréb.) Kütz. etc., but here these other species are not seen.

32. *E. anisatum* Ralfs—Length 88μ; breadth 41μ; breadth of isthmus 13μ; breadth of polar lobes 19μ; thickness 31μ. (Pl. III, figs. 16-17)

33. *E. sinuosum* Lenorm.—Length 70μ; breadth 40μ; breadth of isthmus 11μ; breadth of polar lobes 20μ; thickness 25μ. (Pl. III. figs. 18-20)

34. **E. akaiense** Hinode sp. nov. (Pl. IV. figs. 1-6)

E. mediocre, 2-2•1/3-plo longius quam latum, profunde constrictum, sinu angusto lineari; semicellulae truncato-pyramidatae, angulis basalibus subrectangulari-

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bus, marginibus lateralibus biundulatis, elevatione mediana prominentibus, lobo polari subquadratis, angulis apicalibus quadrato-rotundatis, apicibus convexis incisula mediana profundissima, juxta supra isthmi cum tumore depresso singulo, in centro semicellularum scrobiculis triangulariter ordinatis dispositis; a vertice visae ellipticae polis rotundatis marginibus convexis; a latere visae subovato-oblongae apicibus rotundatis, marginibus ad parte inferiori subparallelibus; membrana minute punctata.

Long. 63–74 μ; lat. 30–33 μ; lat. isthm. 11–12 μ; lat. lob. pol. 18–20 μ; crass. 21 μ.

This new species shows close relation to *E. sinuosum* Lenorm. in its outline, but the lacking of the central and intralobular basal tumors is its conspicuous character; somewhat flat basal tumor above the isthmus is also characteristic.

35. *E. gnathophorum* West and G.S. West—Length 69 μ; breadth 35 μ; breadth of isthmus 10 μ. (Pl. III, figs. 21, 22)

This is a widely distributed species in Japan, and especially abundant in the peaty bogs.

36. *E. Lütkemülleri* Duc. var. *carniolicum* (Lütkem.) Krieg.—Length 30–33 μ; breadth 20–22 μ; breadth of isthmus 7 μ; breadth of polar lobes 14–15 μ; thickness 14 μ. (Pl. IV, figs. 7–9)

The lateral lobes of this form are rounded and not undulated, its outline being rather near to *E. sublobatum* Bréb., but by the peculiar thickness of the membrane at the central part and the scrobicule immediately above it, I can identify the specimens with this species.

37. *E. insulare* (Wittr.) Roy—Length 25 μ; breadth 17 μ; breadth of isthmus 6 μ; breadth of polar lobes 11 μ; thickness 11 μ. (Pl. IV, figs. 10–12)

38. *E. pulchellum* Bréb.—Length 28 μ; breadth 21 μ; breadth of isthmus 7 μ. (Pl. IV, fig. 13)

39. *E. octogibbosum* Krieger forma. (Pl. IV, fig. 14)

This form is fairly larger, upper and lower lateral lobules having short conical spines; 4 verrucae of the semicell which are situated inside the polar and lateral lobes being rather smaller. It is near to *E. Turneri* West in appearance.

40. *E. ceylanicum* (West and G.S. West) Krieger var. **Ikegamii** Hinode var. nov. (Pl. IV, fig. 15–17)

Var. paulo major, 1•1/6-plo longior quam lata, incisuris lateralibus rectangularibus, lobis lateralibus subquadratis levissime emarginatis, lobis polari quadratis, angulis rectangulariter rotundatis, tumori centrali cum angulis granulorum duobus

et in centro granulo singulo (e vertice visae elongato conico), tumoribus lateralibus cum annulo granulorum 5 vel 6 et in centro singulo unoquoque (e vertice visae elongato-conico spiniformi); e latere visae semicellulae subrectangulariter ovatae; e vertice visae depresso-oblongae, lobo polari quadrati, marginibus emarginatis.

Long. 70–80 μ; lat. 60–68 μ; isthm. 13–16 μ; lat. lob. polar. 28–31 μ; crass. 38 μ.

41. *Micrasterias pinnatifida* (Kütz.) Ralfs—Length 53 μ; breadth 57 μ; breadth of isthmus 10 μ. (Pl. IV, fig. 18) Very rare in this district.

42. *M. truncata* (Corda) Bréb.—Length 105 μ; breadth 102 μ; breadth of isthmus 21 μ; breadth of polar lobes 67 μ; thickness 46 μ. (Pl. IV, figs. 19, 20)

This is one of the bog-desmids and is frequently seen here.

43. *M. sol* (Ehrenb.) Kütz. var. *ornata* Nordst.—Length 135 μ; breadth 117 μ; breadth of isthmus 15 μ. (Pl. IV, fig. 21) Very rare.

44. *M. denticulata* Bréb. var. *angulosa* (Hantzsch) West and G. S. West (Pl. IV, fig. 22)

Only somewhat deformed semicell was observed, which has much shorter incision and cell-wall coarsely punctate. From its form of lobulets it is near to var. *angustosinuata* Gay which is not a distinct variety.

45. *Cosmarium Westii* Bernard in Krieger, Archiv. f. Hydrob. **11**: Suppl.: 190 t. 8, f. 6 (1932)—Length 76–78 μ; breadth 42–46 μ; breadth of isthmus 40–43 μ. (Pl. IV, fig. 23)

This species was recorded from Java by Bernard and Krieger. I could see a few specimens here.

46. *C. cucurbita* Bréb.—Length 37 μ; breadth 21 μ; breadth of isthmus 19 μ. (Pl. IV, fig. 24)

47. *C. parvulum* Bréb.—Length 39–44 μ; breadth 17–19 μ; breadth of isthmus 16–18 μ. (Pl. IV, figs. 26–27)

This is somewhat widely distributed in Japanese bogs. In general it is rather larger and the cell-wall is minutely punctate; smaller and smooth-membraned form is distinguished as forma *minor* West and G.S. West. (Trans. Linn. Soc. Bot. ser. 2, **6**: 168, 1902)

48. *C. globosum* Buluh.—Length 31 μ; breadth 18 μ; breadth of isthmus 16 μ. (Pl. IV, fig. 25).

49. *C. pachydermum* Lund.—Length 99 μ; breadth 73 μ; breadth of isthmus 26 μ; thickness 46 μ. (Pl. V, figs. 4–6)

50. *C. pyramidatum* Bréb.—Length 103 μ; breadth 60 μ; breadth of isthmus

16 μ; thickness 46 μ. (Pl. V, figs. 1-3)

51. *C. pseudopyramidatum* Lund.—Length 51 μ; breadth 32 μ; breadth of isthmus 10 μ. (Pl. V, figs. 11, 12)

52. *C. obsoletum* (Hantzsch) Reinsch—Length 48 μ; breadth 55 μ; breadth of isthmus 26 μ. (Pl. V, fig. 13)

—— var. *stivense* Gutw.—Length 65 μ; breadth 68 μ; breadth of isthmus 31 μ. (Pl. V, fig. 14)

53. *C. auriculatum* Reinsch var. **reductum** Hinode var. nov. (Pl. V, fig. 7)

Var. angulis basalibus semicellularum oblique truncatis, granulis conicis 2 vel 3 unoquoque. Long. 46 μ; lat. 49 μ; lat. isthm. 24 μ; crass. 24 μ.

This variety shows a much reduced form compared to the type; basal part of the semicell not being produced into spines, but being obliquely truncate and furnished with two or three conical granules; dorsal margins sometimes truncately rounded.

54. *C. ocellatum* Eichl. et Gutw. var. **glabrum** Hinode var. nov. (Pl. V, figs. 8-9)

Var. fere tam longior quam lata; semicellulis in centro glabris, dorso paulo truncato-rotundatis; membrana minute punctata.

Long. 25-26 μ; lat. 24-25 μ; lat. isthm. 6-7 μ; crass. 13-14 μ.

55. *C. granatum* Bréb.—Length 25 μ; breadth 16 μ; breadth of isthmus 6 μ. (Pl. IV, fig. 36)

56. *C. depressum* (Näg.) Lund. var. *granulatum* Turn.—Length 21 μ; breadth 25 μ; breadth of isthmus 7 μ. (Pl. IV, fig. 37)

57. *C. pseudoscenedesmus* West aed G. S. West—Length 30 μ; breadth 46 μ; breadth of isthmus 11 μ; thickness 19 μ. (Pl. V, fig. 15) Very rare.

58. *C. sublateriundatum* West and G. S. West—Length 42 μ; breadth 34 μ; breadth of isthm. 11 μ; thickness 19 μ. (Pl. IV, figs. 38, 39) Very rare.

59. *C. subcucumis* Schmidle—Length 54 η; breadth 33 μ; breadth of isthmus 15 μ. (Pl. IV, fig. 30)

Cell-wall is finely punctate. This is rather common in Japanese bogs.

60. *C. quadratum* Ralfs—Length 57 μ; breadth 33 μ; breadth of isthmus 14 μ. (Pl. V, fig. 10)

61. *C. exiguum* Arch.—Length 27 μ; breadth 16 μ; breadth of isthmus 7 μ; thickness 9 μ. (Pl. IV, figs. 31, 32)

62. *C. contractum* Kirch. var. *ellipsoideum* (Elfv.) West and G.S. West—Length 35 μ; breadth 28 μ; breadth of isthmus 8 μ. (Pl. IV, fig. 29)

63. *C. impressulum* Elfv.—Length 28 μ; breadth 19 μ; breadth of isthmus 6 μ. (Pl. IV, fig. 33)

64. *C. connatum* Bréb.—Length 68 μ; breadth 50 μ; breadth of isthmus 39 μ. (Pl. IV, fig. 28)

65. *C. Regnesi* Reinsch var. *tritum* West—Length 11 μ; breadth 11 μ; breadth of isthmus 6 μ; thickness 6 μ. (Pl. IV, figs. 34, 35)

Explanation of plates III-IV

Plate III: 1-3. *Pleurotaenium Ehrenbergii* (Bréb) De Bary 1, 2, ×225; 3, ×440. 4, 5. *P. nodosum* (Bail.) Lund. 4, ×440; 5, a monstrous form, ×225. 6, 7. *P. ovatum* Nordst. var. *inermius* Moebius 6, ×225; 7, ×440. 8. *Triploceras gracile* Bail. ×440. 9, 10. *Tetmemorus Brêbissonii* (Menegh.) Ralfs var. *minor* De Bary ×440. 11, 12. *T. granulatus* (Bréb.) Ralfs var. *attenuatus* West ×440. 13, 14. *T. laevis* (Kütz.) Ralfs var. *minutus* Krieg. ×440. 15. *Euastrum ampullaceum* Ralfs ×440. 16, 17. *E. anisatum* Ralfs ×440. 18-20. *E. sinuosum* Lenorm. ×440. 21, 22. *E. gnathophorum* West and G.S. West ×440.

Plate IV: 1-6. *Euastrum akaiense* Hinode sp. nov. ×440. 7-9. *E. Lütkemülleri* Duc. var. *carniolicum* (Lütkem.) Krieg. ×440. 10-12. *E. insulare* (Wittr.) Roy. ×440. 13. *Euastrum pulchellum* Bréb. ×440. 14. *E. octogibbosum* Krieg. forma. ×440. 15-17. *E. ceylanicum* (West and G. S. West) Krieg. var. *Ikegamii* Hinode var. nov. ×440, 18. *Micrasterias pinnatifida* (Kütz.) Ralfs ×440. 19, 20. *M. truncata* (Corda) Bréb. ×440. 21. *M. sol* (Ehrenb.) Kütz. var. *ornata* Nordst. ×440. 22. *M. denticulata* Bréb. var. *angulosa* (Hantzsch) West and G. S. West. ×225, a much deformed form. 23. *Cosmarium Westii* Bernard ×440. 24. *C. cucurbita* Bréb. ×440. 25. *C. globosum* Bulnh. ×440. 26, 27. *C. parvulum* Bréb. ×440. 28. *C. connatum* Bréb. ×440. 29. *C. contractum* Kirchn. var. *ellipsoideum* (Elfv.) West and G. S. West ×440. 30. *C. subcucumis* Schmidle. ×440. 31, 32. *C. exiguum* Arch. ×440. 33. *C. impressulum* Elfv. ×440. 34, 35. *C. Regnesi* Reinsch var. *tritum* West ×440. 36. *C. granatum* Bréb. ×440. 37. *C. depressum* (Näg.) Lund. var. *granulatum* Turn. ×440. 38, 39. *C. sublateriundatum* West and G. S. West ×440.

□TANAKA, Tyôzaburô: **Species problem in Citrus.** 152 p., 3 pl. 昭和29年3月発行　丸善（発売所）￥350.

A critical study of wild and cultivated units of *Citrus*, based upon field studies in their native homes という副題がある。著者が多年にわたつて世界中の柑橘類を研究した結論がまとめられていて，特に Swingle (1948) の分類に対する見解が明らかにされている。又柑橘類の分布を主として「28°N と 98°E の交叉点から南東に 19°N と 108°E の交叉点を結ぶ斜めの線」を Tanaka Line と名付け，これを植物分布上の重要な線であると考えている。(H. H.)
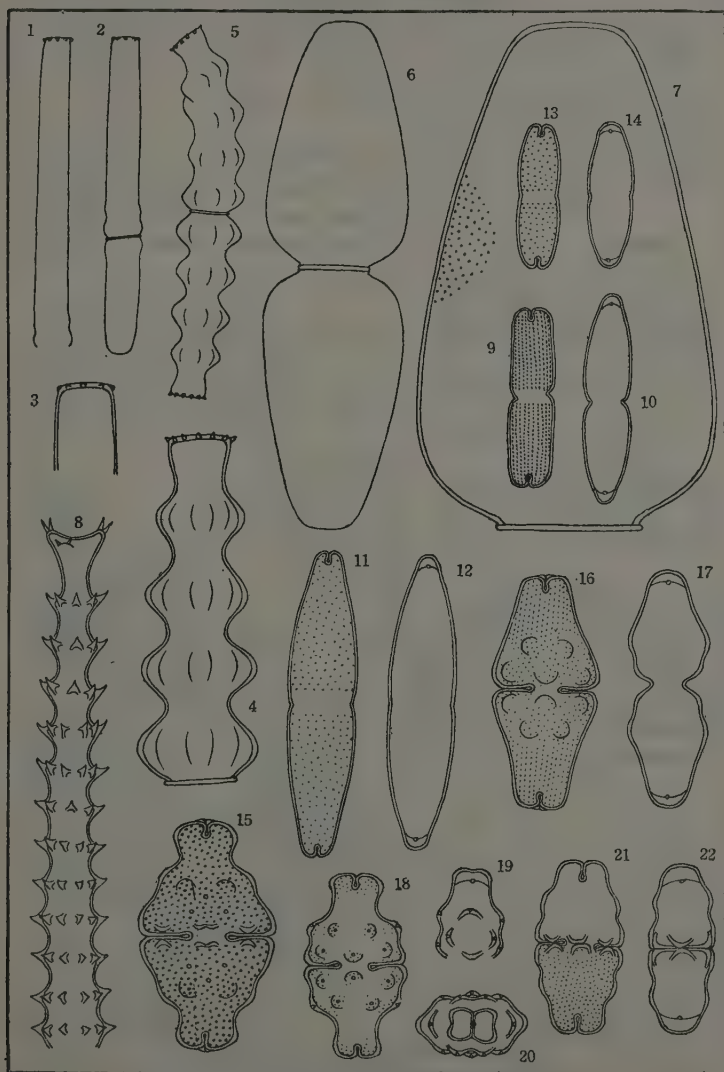
Plate III. Hinode, The desmid-flora of Akai-yachi
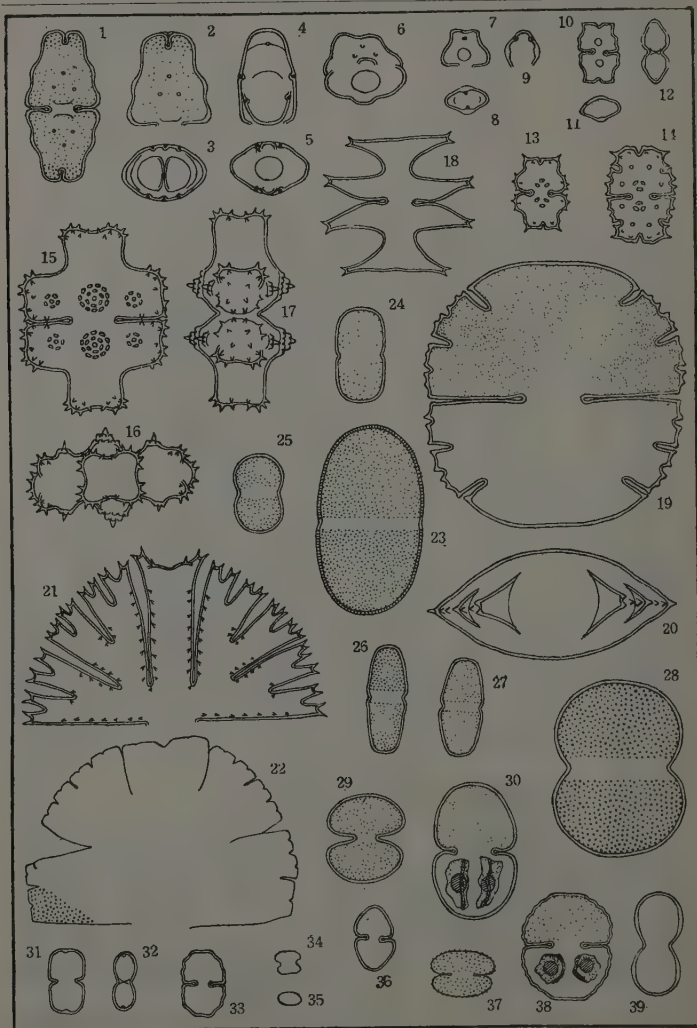
Plate IV. Hinode, The desmid-flora of Akai-yachi

Harumi OCHI*: **Contributions to the mosses of Bryaceae in Japan (5)**

越智春美*: 日本産ハリガネゴケ科蘚類の研究 (5)

20) **Pohlia acuminata** Hoppe et Hornsch. in Flora **2**: 94 (1819); Andrews, in Grout's Moss. Fl. N. Am. **2**-3: 192 (1935). (Fig. 1).

Nom. Jap. Miyama-hechimagoke (nom. nov.)

Hab. on soil. Honshû—Prov. Shinano: Mt. Yatsugatake—Iwôdake, alt. ca. 2,500 m (Coll. K. Yano, July 26, 1952, No. 818—H. Ochi, No. 3,874).

New to Japan.

21) **Pohlia cucullata** (Schwaegr.) Bruch in Flora **9**: 274 (1826); Andrews, in l. c. 195 (1935). (Fig. 2).

Bryum erythrocarpum (non Schwaegr.) Sakurai in Bot. Mag. Tokyo **66**: 162 (1953).

Fig. 1. *Pohlia acuminata* Hoppe et Hornsch.: 1. Fruiting plants ×1.5, 2–3. Leaves ×13, 4. Perichaetial bracts ×13, 5. Apical part of leaf ×120, 6. Cells from middle of leaf ×120, 7. Ditto from base ×120, 8–9. Capsules ×6.5, 10. Peristome and exothecial cells ×63.

Nom. Jap. Shidare-hechimagoke (nom. nov).

Hab. on soil. Hokkaidô—Prov. Nemuro: Mt. Rausudake, alt. ca. 600 m. (Coll. M. Saitô, July 28, 1953, No. 14,267—H. Ochi, 4,796). Honshû—Prov. Kai: Mt. Arakawadake, alt. ca. 2,900 m (coll. N. Takaki, July 17, 1949, No. 6,776 (determined by Sakurai as *Bryum erythrocarpum*)—H. Ochi, No. 3,720).—Prov. Echigo; Mt. Myôkosan~Mt. Hi'uchiyama, Tengu-no-niwa-Bog, alt. ca. 2,100 m (coll. H. Ochi, Aug. 13, 1954, No. 4,441).

The former two of above meterial are, judging from the description and illustrations, smaller in gametophytes, more acutely pointed and long-nerved in leaves, giving the "cucullate" effect rarely in lower leaves only, and more distinctly reflexed in leaf-margin. But such characteristics seem

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to be not so essential to separate them from the typical form but to be caused by ecological conditions of the habitats. The last material is very conspicuous in the cucullate effect of the leaves, and seems to be typical in general except the opercula being little pointed at their apices.

This species seems to be a new addition to the flora of East-Asia as well as new to Japan. Dr. K. Sakurai has published *Bryum erythrocarpum* based on the specimens collected by Mr. N. Takaki, but his determination was wrong.

Fig. 2. *Pohlia cucullata* (Schwaegr.) Bruch: 1-3. Leaves ×13, 4. Apex of lower leaf ×125, 5. Ditto of upper leaf ×60, 6. Deoperculated capsule ×6.5, 7. Opercular portion of capsule ×14, 8. Peristome, annulus and exothecial cells ×6.5. 3, 5 and 8 from No. 4,441 and the remaining from 3,720.

22) **Pohlia Yanoi** Ochi, sp. nov. (Fig. 3).

Dioica ? Planta gracilis, 2.5–3.5 cm alta, densissime caespitosa, nitidula. Caulis erectus, bene ramosus, inferne radicans fusco-tomentosus, superne rubescenti-fuscus, inferne remote, sed superne dense foliatus. Folia rubra, sed interdum lutescenti-fusca vel viridia, sicca flexuoso-adpressa, imbricata, madida erecto-adpressa vel erecta, inferiora triangulari-lanceolata, ca. 0.6–1×0.3–0.4 mm, apice acute acuminata, superiora sensim majora, comata, ca. 1.5–2.2×0.45 mm, anguste oblongo- vel lineari-lanceolata, planiuscule concava, apice acutissime acuminata, marginibus anguste revolutis et superne minute serrulatis, costa rubra, percurrente vel subexcurrente rigida, sed in foliis inferioribus saepe infra apicem folii evanida, basi longe decurrens, ca. 0.1 mm lata, superne sensim angustata; cellulis densis, crassimembranis, medianis lineari-rhomboidalibus vel elongato-hexagonis, ca. 50–70×8–10 μ, superioribus brevioribus, irregulare subhexagonis, marginalibus ±angustioribus, basilaribus brevioribus et latioribus, ca. 30–60×12–18 μ, rectangularibus. Folia perichaetialia angustiora, marginibus superne distinctiore denticulatis. Seta erecta, 1.7–2.2 cm longa, interdum ±flexuosula, nitida, inferne lutescenti-fusca, seperne lutea. Capsula nutans, sed interdum horizontalis, lutescenti-fusca, oblongo-pyriformis, ca. 2.5–3×0.9 mm, sicca sub ore ±constricta, collo brevi vel longiusculo. Peristomium duplex, exostomii dentes lineari-lanceolati, pallide

lutei, superne grosse papillosi, inferne anguste marginati, ca. 0.4×0.1 mm, endostomii hyalini, membrana indistincte minutissimeque papillosa, altiuscula, ca. 1/2 dentibus externis, processus dentibus subaequilongi, anguste perforati, densissime minutissimeque papillosi, cilia 2–3, brevissima, ±nonulosa minutissime densissimeque papillosa. Operculum plani-conicum et obtusiuscule apiculatum, ca. 0.25mm altum. Sporae subglobosae, 13–15×15–20 μ, sordide lutescenti-virides, indistincte minutissimeque papillosae. Planta mascula desunt.

Fig. 3. *Pohlia Yanoi* Ochi: 1–3. Leaves ×13, 4–5. Perichaetial bracts ×13, 6. Apical margin of leaf ×125, 7. Cells from middle of leaf ×125, 8. Ditto from base ×125, 9. Capsule ×6.5, 10. Peristome and exothecial cells ×60, 11. Spores. ×160.

Nom. Jap. Aka-hechimagoke.

Hab. on moist soil. Honshû—Prov. Shinano: Mt. Yatsugatake-Yokodake, alt. ca. 2,700 m (Coll. K. Yano, Aug. 4, 1950, No. 357—H. Ochi, No. 3,853—Typus).

The present species seems to be very close to *P. Schimperi* (C. Müll.) Andrews, but differs from it in more branched stems, more closely papillose tips of outer peristome teeth and more declined cilia of inner peristome.

23) **Epipterygium Tozeri** (Greb.) Lindb. var. **rotundifolium** Ochi et Mayebara, var. nov. (Fig. 4)

Folia subrotunda vel late ovalia, basi tenuissima, costa breviora, medium vel interdum infra medium folii evanida, sed in foliis superioribus longiuscula.

Nom. Jap. Maruba-ko-akasujigoke.

Hab. on rock-wall. Kyushû—Prov. Higo (Kumamoto Pref.): Kurosaka, Hitoyoshi City, alt. ca. 110 m (Coll. K. Mayebara, Feb. 20, 1949, No. 2,148—H. Ochi, No. 3,820—Typus).

Fig. 4. *Epipterygium Tozeri* (Greb.) Lindb. var. *rotundifolium* Ochi et Mayebara: 1–2. Median leaves ×15, 3. Upper leaf ×15, 4. Median margin of leaf ×125.

The species is new to Japan

24) **Bryum erythrocarpum** Schwaegr. in Suppl. **1**: 100 (1816); [not in Bot. Mag. Tokyo **66**: 162 (1953)]. (Fig. 5)

Nom. Jap. Akami-no-hariganegoke.

Hab. on moist soil. Honshû—Prov. Echigo: Mt. Myôkôsan, near Hot Spring Tsubame, alt. ca. 1,100 m [Coll. H. Ochi, Aug. 11, 1954, No. 4,336 (mixed with *Anomobryum japonicum* Broth.)].

This species was reported by the late Dr. Dixon[1] from Hong-Kong as new to China. The present report is perhaps the second record from Asia as well as new from Japan.
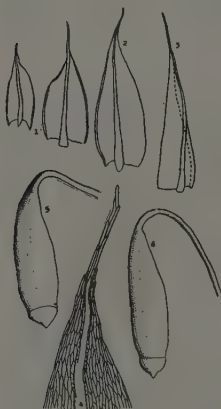
Fig. 5. *Bryum erythrocarpum* Schw.: 1-2. Leaves ×13, 3. Perichaetial bract ×13, 4. Leaf-apex ×50, 5-6. Capsules ×6.5.
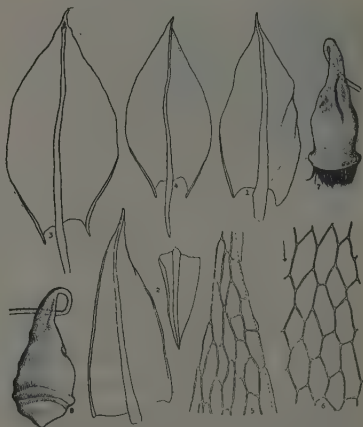
Fig. 6. *Bryum Weigelii* Spreng.: 1. Leaf ×13, 2. Perichaetial bracts ×13, 3-4. Leaves of innovation ×13, 5. Apical margin of leaf ×25, 6. Cells from middle of leaf ×125, 7. Deoperculated capsule when dry ×6.5, 8. Capsule ×6.5. Drawn from No. 3,726.

25) **Bryum Weigelii** Spreng. in Mant. Prim. Fl. Halensis, Add. 55 (1807); Andrews, in l. c. **2-4**: 226 (1940). (Fig. 6)

Bryum Duvalii Voit. in Sturm, Deutschl. Fl. **2**; Heft **12**: 10 (1811).

Bryum Blindii (non Br. et Schimp.) Sakurai in l. c. **66**: 161 (1953).

Nom. Jap. Numa-hariganegoke.

1) Hong-kong Naturalist. Suppl. 2: 138 (1933).

Hab. on very moist soil in bogs or in alpine region. Honshû—Prov. Kôzuke (Gumma Pref.): Ozegahara Basin-Aka-tashiro Bog, alt. ca. 1,400 m (Coll. H. Ochi, July 19 & 21, 1950, Nos. 328 & 350).—Shinano: Mt. Kirigamine, alt, ca. 1,650 m (Coll. H. Suzuki, June 13, 1949, No. 5,878—H. Ochi, No. 1,843): Mt. Shiroumadake, near Hot Spring Yari, alt. ca. 2,000 m [Coll. N. Takaki, Aug. 1, 1949, No. 7,075 (determined by Sakurai as *B. Blindii*)—H. Ochi, No. 3,726].—Ettyû (Toyama Pref.): the sourse area of River Kurobe, alt. ca. 2,500 m (Coll. N. Takaki, Aug. 10, 1952, Nos. 12,480 & 12,486—H. Ochi, Nos. 3,766 & 3,767).

In Japan, this species is sterile in general. So far as I know, only the material collected by Mr. N. Takaki from Mt. Shiroumadake is in fruit. Dr. Sakurai reported *B. Blindii* based on the above meterial, but his determination was wrong.

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20. **ミヤマヘチマゴケ**(新称) 信州八ヶ岳の一峯硫黄岳からの矢野孝二氏の採品である。♂個体はみられないが，♀♂異株[2]の型のものと思われる。近縁種からは，植物体やや細長で光沢なく，蒴柄は短くて多少曲り，子嚢の内歯がより退化している等の諸点で区別できる。筆者はかつて本種が北海道に産することを報告[3]したが，それはナガヘチマゴケ (*Pohlia elongata* Hedw.) であることがわかつたのでここで訂正し，改めて日本新産とする。

21. **シダレヘチマゴケ** (新称) ♀♂同株のもので，ヘチマゴケとは子嚢下垂しその外歯は小さくて黄色，内歯はより退化し，葉にはしばしば "先端が急に鈍頭乃至円頭になる" (cucullate effect) ものがある等の諸点で区別される。妙高山麓高谷池ヒュッテより火打山に至る中途 "天狗の庭" 湿原からの筆者の採品は蒴蓋があまり尖らない以外は基本型のものによく符号し，葉の cucullate effect も著しいが，甲州荒川岳頂上附近からの高木典雄氏の採品と北海道知床半島羅臼岳からの斎藤君の採品とには葉の cucullate effect は稀に下葉に認められるにすぎず，肋もよく発達し葉縁もやや強く巻き，又植物体も小さい。しかしこの程度の相異は恐らく育地の生態的条件に基くものと思われる。荒川岳産のものは桜井博士によつてアカミノハリガネゴケとして報告されているが，前記の如く明らかに誤りである。本種は日本新産であるが，恐らく東亜地域からも未報告のものと思われる。

22. **アカヘチマゴケ** 八ヶ岳の一峯横岳からの矢野氏の採品で学名は同氏を記念したものである。葉は熟すると赤くなることが多く，一見欧米の *P. Schimperi* (C. Müll.) Andrews の観があるが，植物体はよく分枝し，外蘚歯のパピラ著しく，内蘚歯の間毛もより退化しているので別種とすべきものと思われる。

23. **マルバコアカスジゴケ** 熊本県人吉市黒坂の凝灰岩を切り開いた路傍の岩壁から

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2) ♀♂同株のものを *Pohlia polymorpha* Hoppe et Hornsch. として種別する人もある。

3) 昭和 27 年 10 月日本植物学会第 17 回大会における講演。

の前原勘次郎氏の採品である。基本型のものに比して葉はより丸くその基脚は非常に細く，肋も短くて中葉で葉のほぼ中部或はやや下部に終つているので基本種と区別すべきものであろう。前原氏は観察の結果と意見とを添えて標品を筆者に送られたので，ここに共同命名とする。種としては日本新産で，基本種には**コアカスジゴケ**と命名すべきものと考えその丸葉品の意味で和名をつけた。

24. **アカミノハリガネゴケ**[4] 越後国妙高山燕温泉上方のコンクリート製土砂崩壊防止用堰堤下の湿土上からの筆者の採品である。前記の如く桜井博士の報告は誤りであるから，ここに改めて日本新産とする。しかし同博士の用いられた和名は本種に適当なものと思われるのでそのままここに採用する。本種は始め欧州から報告せられ，後に香港[1]・ハワイ[5]等からも知られるにいたつたが，その産地の報告は少くその分布は現在のところ典型的な隔離分布と言うべきものであろう。この報告はアジア地域からは二度目のものと思われる。

25. **ヌマハリガネゴケ** 本種の稔性のものは我が国では殆んどみられない。白馬岳鑓温泉附近からの高木氏の採品は完全な子嚢をつけている。桜井博士は同標品を *B. Blindii* Br. et Schimp. とされたが，それは明らかに誤りで本種は同種からは遙かにかけ離れたものである。本種については既に飯柴氏[6]の報告があるが，確実な報告はないように思われるので日本新産とする。

終りにのぞみ貴重な標品をいただいた高木典雄・矢野孝二・鈴木兵二及び斎藤実の諸氏に深甚の謝意を表する。 (昭和 29 年 10 月)

正　誤 Errata of this Journ. **29** (7 & 9).

頁 (Page)	行 (Line)	誤 (For)	正 (Read)
210	22	Monoicum	Paroica
212	17	Aerodictyon	Areodictyon
215	32	列	4 列
	33	アミハリゴケ	アミハリガネゴケ
263	4	Monoicum	Paroica
	14	maginalibus	marginalibus
	15	basalibus	basilaribus
264	1	2,521	2,921
	3	monoicous	paroicous
	10	viditur	videtur
265	Fig. 1	7. capsules ×65	7. capsules ×6.5
	〃	exothesial	exothecial
266	Fig. 3	Fruiting plant ×3	Fruiting plant ×1.5
	11		New to Japan.
267	6	spit	spite
	22～23	Bull. Herb. Boiss. 2 sér **8**: 128 (1907)	Bull. Soc. bot. Genève 2 sér. **1**-3: 128 (1909)

4) 植雑 **16**: 162 (1953).
5) Bartram, E. B., Manual of Hawaiian Mosses 119 (1933).
6) 日本産蘚類総説: 98. 昭和 5 年

○ビランジについて（山崎　敬） Takasi YAMAZAKI: On *Melandryum Keiske* (Miquel) Ohwi.

ビランジ類は本州中部・北海道中部に分布するが変化に富み，Maximowicz 氏の頃より色々な形が報告されている。武田久吉博士はこれらを整理して，ビランジ，オオビランジ，ツルビランジの3つの形を変種として認め，ビランジの白花品としてシロバナビランジを報告している。宮部・館脇博士は北海道からカムイビランジを新種として報告した。北海道のものは資料不足でよくわからないが，本州のものは大体3つの形が認められ，地域的にも異つている。1つはオオビランジで丈が高く 20～60 cm あり，花梗や萼が殆んど無毛である点で他から容易に区別される。八ッ岳，秩父，駒・鳳凰山塊，伊那豊口山のクリ帯上部からブナ帯にあたる 800～1300 m の地域の岩壁に懸垂している。稀にシラビソ帯にあたる 1800 m の所にもみられる。オオビランジと花や葉の形は殆んど同じであるが，茎が著しく伸び 1 m 以上にもなるものが妙義山にありツルビランジと呼ばれる。他の2つの形は従来ビランジと呼ばれていたもので，花梗や萼に腺毛が密生している点オオビランジと異る。然し形態的にも，分布の点からも明らかに2つの形がある。1つは大井川上流，丹沢山塊，日光山塊に分布し 1000～1300 m のクリ帯上部といつた場所の岩壁に懸垂している。腺毛をもつ以外はオオビランジに似て茎は長く20～50 cm になり，葉の先は細長く尾状に尖る。茎の先の方は花序となり小さな苞をもつた3～4個の花をつけ，花は紅紫色で小さく 2 cm 内外である。いま1つは赤石山脈の高所 2600～3100 m のハイマツ帯にそつて広く分布し，岩場の岩の間や叢の中にはえている。ビランジに較べると茎は直立して丈が小さく10～20 cm，せいぜい大きくて 25 cm である，葉の先は尖るが尾状に細長くならず，ずんぐりしている。普通茎の先に小苞をもたない1つの花をつけるだけで，稀に頂は花の腋に小苞をもつた一花をつける。萼裂片はオオビランジ，ビランジが広三角形であるのに対し狭三角形で細長い。最も目立つ特徴は花が大きい点で直径 3～4 cm ある。茎が短くて花が大きいのでビランジ類の中で最も美しい。以上のように赤石山脈のものは明らかに区別できるのでタカネビランジと名ずける。これはオオビランジと同じ山にはえているが生育地域は明瞭に異なつている，形態的にも別種の感があるがビランジを仲介として連絡する。タカネビランジのうち甲斐駒岳，鳳凰山にあるものは花がビランジ，オオビランジと同じように紅紫色である。ところが仙丈岳，北岳から聖岳にわたつてみられるものは純白色で，ときに桃色のかげを持つものがあるが紅紫色のものはみられない。武田博士は鳳凰山からシロバナビランジ (*Silene Keiskei* foma *minor* lusus *albescens*) を書いているが，私のみた所では鳳凰山には赤石山塊のもののような白花はみつからなかつた。駒・鳳凰山塊と白峯・赤石山塊とで花の色が異つているようである，後者をシロバナタカネビランジと名ずける。武田博士は信濃前岳から *Silene Keiskei* forma *minor* lusus *leucantha* なる白色の大きな花びらをもつたものを報告している。前岳とは仙丈岳であつて，シロバナタカネビラン

ジにあたると思われる。タカネビランジは全形，葉の形，花序の形など花の大さを除いてカムイビランジ (*Melandryum hidakaalpinum* Miyabe et Takewaki) と非常によく似ている。又北海道の栽培品から書かれた *Silene Maximowicziana* Rohrb. (*Silene Maximowicziana* lusus *nana* Maxim. ex Williams) も，記載から判断するとカムイビランジに近いもので，これらの関係は今後確かめねばならない。

Melandryum keiskei (Miquel) Ohwi in Journ. Jap. Bot. **12**: 659 (1936).

var. **keiskei**.—*Melandryum keiskei* var. *majus* (Takeda) Takeda, Alp. Pl. Japan, pl. 15 (1938).

オオビランジ. 採集地. 信濃: 下伊那郡大鹿村豊口山; 上伊那郡赤穂町大田切川; 美和村戸台川. 甲斐: 南巨摩郡西山村西山 700 m; 中巨摩郡芦安村夜叉神峠; 鳳凰山ドンドコ沢 1200 m; 同 1800 m; 同赤薙沢 1000～1200; 駒岳 900 m; 北巨摩郡八岳: 上野: 多野郡上野村浜平 700 m.

forma **procumbens** (Takeda) Yamazaki stat. nov.—*Silene keiskei* Miquel var. *procumbens* Takeda in Not. Bot. Gard. Edinb. **39**: 236 (1915). *Melandryum keiskei* var. *procumbens* Takeda, Kozan-syokubutu-zui, ed **2**: 79 (1937).

ツルビランジ. 採集地. 上野: 妙義山.

var. **minus** Takeda, l. c. (1938) pro parte.

ビランジ. 採集地. 駿河: 安倍郡井川村中ノ宿 1000 m. 相模: 丹沢山 1000～1300 m. 下野: 日光馬返 800 m; 同華厳 1300 m; 塩谷郡栗山.

var. **akaisialpinum** Yamazaki var. nov.

Folia latiola oblanceolato-oblonga. Flores terminales solitarii interdium 2-floro dispositi vulgo ebracteolati, pedicelis calycique dense puberulis. Corolla rosea 3-4 cm. in diametro.

Hab. Prov. Kai, in regione alpina Hoozan 2600～2800 m. alt.—Typus in Herb. Univ. Tokyo.

タカネビランジ. 採集地. 甲斐: 鳳凰山 2600～2800 m; 駒岳, 鋸山; 釜無川横岳.

forma **leucanthum** (Takeda) Yamazaki stat. nov.—*Silene keiskei* Miquel forma *minor* Takeda lusus *leucantha* Takeda in Not. Bot. Gard. Edinb. **39**: 236 (1915).

シロバナタカネビランジ. 採集地. 赤石山脈 2200～3100 m. (仙丈岳・北岳・北荒川岳・塩見岳・小日影山・板谷岳・荒川岳・千枚岳・赤石岳・中盛丸山・兎岳・聖岳).

○白花二題（水島正美） Masami MIZUSHIMA: On two white-flowered forms.

黒川喬雄氏から送られた標本中にクサヤツデの白花品があつた。それは奈良県宇陀郡

曽爾(ソニ)村の落合なる地の産で，杉林の下に拡がる全体に暗紫色を帯びる常形の大群落中に1本あつたと云う。之を移植して開花させたものを1953年10月6日に腊葉に作られたる由。全株に全く紫采なく，総苞片の縁辺膜質半透明（但し外側の短小片の先端又は縁にのみ着色することあり），花冠は純白，葯は黄色，冠毛も常形の極く淡き茶色よりも更に淡い。これは明かに白花品と目し得るので，和名**ユキヤツデ**（雪八手）とし次の如く記載する。

Diaspanthus uniflorus Kitam. forma **niveus** Mizushima, f. nov.

A typo toto intense purpureo tincto haec forma tota planta viride floribus albis facile distinguenda.

Scapi cum foliis inflorescentiisque virides. Involucri squamae virides, margine anguste subhyalino-membranaceae, extimae abbreviatae interdum purpureo-marginatae. Corollae perfecte albae. Antherae flavae. Pappi albidi.

Hab. Hondo. Prov. Yamato (Nara pref.): Ochiai, Soni-mura, Uda-gun (Takao Kurokawa, Oct. 6, 1953)—Typus in Herb. Univ. Tokyo.

佐藤邦雄氏の信州軽井沢町，離山の採品に白花フシグロセンノウがある。茎葉に全く紫色を欠き鮮緑色，花冠は真白で黄葯を持つ。常品が茎の各節，葉身，萼等に暗紫色を帯びること多く，花冠朱赤色にて小豆色又は灰紫色の葯を有するに比すれば，また楚々たる感あり良きものである。本草図譜巻之十五，第二十四丁に“あきせんをう”の名の下に2品を図示し，其の左者は紛いもなく白花のフシグロセンノウである。同書には和称を見ぬ様であるから，新に**シロガネセンノウ**(銀仙翁)とする。尚草木図説巻八には白花あるを記し，又濃淡紫色等もあると言つて居り，矢田部先生の日本植物編には栽培品に濃淡紫色白色等ありとして居られる。紫花品は小生未知なので大方の垂教に俟ちたい。

Lychnis Miqueliana Rohrb. forma **argyrata** Mizushima, f. nov.

Corollis niveis, antheris flavis nunquam azureis, aut nodis caulium subtus foliorumque aut dentibus calycium non purpureo suffusis solo viridibus a plantis vulgaribus diversa.

Hab. Hondo. Prov. Shinano (Nagano pref.): Hanare-yama, Karuizawa-machi (Kunio Sato, Sept. 2, 1954)—Typus in Herb. Univ. Tokyo.

〇クサヤツデ神奈川県西丹沢に産す（林　弥栄） Yasaka HAYASHI: A new locality of *Diaspanthus uniflorus* (Schultz.-Bip.) Kitamura.

クサヤツデは本州（東海道，近畿），四国，九州に産することが知られている。近畿地方の紀伊半島や四国，九州では各地に群生しているのが見られるが，東海道ではその

産地が至つて少ない。今日までに知られていた分布の東限地は静岡市竜爪山である（附近の志太郡瀬戸谷村倉田にもエンシュウハグマなどと共に産する。）伊豆半島にはあつてもよさそうに思われるがまだ採集したということを聞かない。筆者は昭和 29 年 10 月 16 日神奈川県足柄上郡三保村の世附国有林（明神峠の北方）内の唯 1 ケ所に 10 本ばかり小群生しているのを発見採集して来た。この地は天然分布の東限地でありまた北限地でもあろうと思われる。そして生じていたところが暖いところでなく，神奈川県の北海道といわれている県下で一番寒い地にあつたことも不思議な事実である。

□ベイレー博士の逝去　米国の植物学者 L. H. Bailey 博士は昨年 12 月 25 日に 96 才の高令で逝去された。博士は晩年まで元気に研究をつゞけられ，多くの著書論文があり，特に栽培植物に関する代表的著述 The Standard Cyclopedia of Horticulture や Manual of Cultivated Plants は日本でも広く読まれ利用されている。(H. H.).

□辻永画伯の万花譜の出版　辻さんが昭和の初め頃に万花図譜正続 12 巻を出されたことは周知のことであるが，今日それに引きつゞいて，しかしそれとは全く別個に新たに 12 巻が編輯され，平凡社から世に出る事になつた。2 月末に第 6 巻がでたが，印刷，解説，体裁いずれも二十数年の進歩がうかがえる。辻さんは大変植物が好きで，折にふれて描かれた野の花，温室の花，園の花が美しく，しかもいかにもその植物の生々した姿で捕えられ，再現されている。第 6 巻は 6 月頃に咲く花を主として編輯され，頁一杯の図の対面に解説がつけてあつて，その花の特徴や歴史や逸話を知ることができる。この解説は園芸植物を佐々木尚友，久保田美夫の両氏が，野外植物を前川が引き受け，牧野先生が眼を通しておられる。各巻 132 図版，美装，箱入，1500 円. 3 月に 2 冊の割で出る予定。(F. M.)

Errata　正　誤　Vol. 30, No. 1 & 2 (1955)

page	line	for	read
5	22	**glacile**	**gracile**
35	27	-tsch. Adj 1.	-tch. Adj. I.
〃	〃	fall	falls
36	7	infloresccences	inflorescences
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55	27	(1654)	(1954)

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